

## ASSESSMENT OF FADAMA FARMERS' ACCESS TO CREDIT IN ONDO STATE

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### ABSTRACT

This study attempts to evaluate the access of fadama farmers to credit in Ondo State, Nigeria. Multistage sampling technique was used to select the respondents. Five (5) Local government areas (LGAs) were purposively selected and from each LGAs twenty respondents were randomly picked making a total of one hundred (100) respondents.

Structured questionnaire was used to elicit information from the respondents. The data so collected were analyzed using descriptive statistics such as frequency distribution and percentages. Regression analysis was run to determine the effect of the various socio-economic variables on respondents' access to credit.

The result showed that 64% of the respondents were between 40-49 years old while 88% of them were married. 71% of the respondent had either primary and secondary and tertiary education. While 69% of them had 4-6 years of fadama farming experience. 81% of the respondent obtained their credit facilities from co-operatives society and NACRDB.

The  $R^2$  value was 0.105 signifying that 10.5% of total variations of access to credit by independent factors were mainly from farming experience and the level of education. Therefore, policy measures should be put in place to liberalise access to credit and education to the respondents.

**KEYWORDS:** Fadama development, access to credit, family labour, socio- economic, Ondo State

### INTRODUCTION

In any tropical lowlands, rivers seasonally flood extensive areas, which may be used for grazing livestock, or growing crops after the water recedes, there are considerable areas of seasonal wetland in Africa that is under cultivation. Small seasonal swamps are usually cultivated and they are important to the subsistence farmers (Borrow 1980). Fadama is a Hausa word meaning low area that is susceptible to seasonal flooding. Fadama development therefore implies the development of the flood plains for agricultural purposes (Mabogunje 1980).

Adewale and Olusola (1980) stated that as flood pass over the surface of the land, water is absorbed by the soil and stored for subsequent use by plants. In some cases agricultural production is entirely dependent on floodwater, which encourages peasant farmers to practice irrigation agriculture along the banks of river during the dry season. The development of fadama agriculture will not only provide income for the farmers but will also make a significant impact on the drive towards self-sufficiency in crop production. The land can be cropped extensively during raining season as well as the dry season.

Efficient fadama agriculture ensures that seasonal farm commodities are available throughout the year with little variation in prices. The advantage in this is that the producer will be sure of selling almost all he produce, and the consumer too is sure of getting what he want throughout the year. FAO (1976) submitted that in the South Western, Nigeria, crops and vegetable such as rice maize, amaranthus species, tomatoes and pepper are very popular and these are also grown in dry season to make more profit. The principal motive to grow crops and vegetable in the fadama is to make gain during the dry season.

Adegeye and Dittoh (1985) define agricultural credit as the processes of obtaining control over the use of money, good and services in the present, in exchange for a promise to repay at a future date. An efficient credit system is a

Table 1: Total Distribution of respondents' socio-economic characteristics.

Demographic	Frequency	Percentage
Gender		
Male	78	78.0
Female	<u>22</u>	<u>22.0</u>
	100	100.0
Age		
20-29 years	14	14.0
30-39 years	22	22.0
40-49 years	<u>64</u>	<u>64.0</u>
	100	100.0
Marital status		
Single	12	12.0
Married	<u>88</u>	<u>88.0</u>
	100	100.0
Family size		
1-4	31	31.0
5-8	57	57.0
9-12	<u>12</u>	<u>12.0</u>
	100	100.0
Level of Education		
No formal education	5	5.0
Adult education	24	24.0
Primary school education	19	19.0
Secondary School education	18	18.0
Tertiary education	<u>34</u>	<u>34.0</u>
	100	100.0

Source: Field Survey, 2007.

pre-condition for effective fulfillment of agricultural roles of generating internal capital through savings, production of sufficient and high quality food for the growing population, providing raw material for industries and generation of foreign exchange earnings through export.

Most innovation in agriculture inevitably increases the credit requirement of the farmers. Small-scale farmers like "fadama" farm holders in Nigeria are poor hence there is low level of savings and hence low level of investment. Jekayinfa (1981) submitted that agricultural credit is very important not only for fostering agricultural development but also in improving farmers' efficiency. This will motivate increased productivity in the agricultural sector. Eswaram and Kolwal(1990) submitted that access to credit affects household's risk bearing ability by altering its risk coping strategy.

Over the years in Nigeria, the government had put in placed policy measures to liberalise access to agricultural credit, hence this study assess the fadama farmers' access to credit in Ondo State.

#### METHODOLOGY

The study was carried out in Ondo State, Nigeria. The state shares boundaries with Osun and Ogun States in the west, Ekiti and Kogi States in the North, Edo and Delta states in the east and Atlantic Ocean in the south. The total population of the state was put at 2,249,348 with a total land area of 14,793,189 square kilometers (1991 census). The State lies entirely in the tropics and she generally enjoys luxuriant vegetation. Majority of the inhabitants are farmers.

Table 2. Distribution of respondents' farming characteristics

Socioeconomic Characteristics	Frequency	Percentage
Farming experience		
1-3	29	29.0
4-6	69	69.0
7 and above	<u>2</u>	<u>2.0</u>
	100	100.0
Land ownership		
Inheritance	46	46.0
On lease	25	25.0
Bought	22	22.0
Gift	2	2.0
Share tenancy	<u>5</u>	<u>5.0</u>
	100	100.0
Farm size		
1-2 ha	76	76.0
3-4 ha	23	23.0
5-6 ha	<u>1</u>	<u>1.0</u>
	100	100.0
Source of credit		
Private money lenders	8	8.0
Cooperatives society	71	71.0
NACRDB	10	10.0
Others	<u>11</u>	<u>11.0</u>
	100	100.0

Source: Field Survey, 2007.

Multi-Stage sampling technique was used to select the respondents. Five Local Government Areas (Ondo west, Ondo East, Ile-Oluji-okeigbo, Odigbo and Ifedore) were purposely selected based on the intensity of fadama farming operations and twenty (20) farmers each were subsequently randomly picked from each local government area, making a total of one hundred (100) respondents. Structured questionnaire was used to elicit information on demographic and socio-economic from the respondents. Descriptive statistics such as frequency tables and percentages were to analyse the data so collected. Regression analysis was used to determine the effect of various socio-economic variables on the respondents' access to credit.

The regression equation is specified as

$$Y = f(x_1 + x_2 + x_3 + x_4 + x_5 + E_i)$$

Where

Y= access to credit and was defined as

Access to credit=  $\frac{\text{Credit used}}{\text{Credit required}}$

Credit required

$x_1$  = farm size

$x_2$  = age

$x_3$  = years of experience

Table 3: Result of the Regression Analysis

Function	Constant B <sub>0</sub>	B <sub>1</sub>	B <sub>2</sub>	B <sub>3</sub>	B <sub>4</sub>	B <sub>5</sub>	B <sub>6</sub>	B <sub>7</sub>	Fraction	R <sup>2</sup>	$\overline{R^2}$
Semi Log	0.537 (0.464)	-0.08208 (0.88)	0.161 (0.125)	0.05587* (0.017)	-0.003893 (0.81)	0.238 (0.115)	- 0.0626 (0.038) *	-0.028441 (0.61)	1.548	0.105	0.15
Double Log	0.876 (0.274)	-0.104 (0.174)	0.240 (0.180)	0.03099 (0.276)	-0.05298 (0.138)	0.363 (0.173)	-0.178 (0.109)	-0.06337 (0.114)	1.318	0.091	0.31

Figure in parentheses are standard error

\*significant at 5%

x<sub>4</sub> = family size

x<sub>5</sub> = income

x<sub>6</sub> = education level

x<sub>7</sub> = source of credit

E<sub>i</sub> = error term

## RESULTS AND DISCUSSION

Some socio economic characteristics of the respondents were as analyzed in Table1. It shows that 78% of the respondents were males. This may imply that fadama farming involves energy exertion that could only be provided by males. Though the women were also involved to some extent. The age bracket of the respondents shows that majority (64%) are in the age range of 40-49 years while all respondents were below 50 years. The ability to put in physical effort into farming depends largely on the age of the farmer and this may conform with earlier assertion that fadama farming involved energy exertion.

Finding further showed that 88% were married. The married Fadama farmers are likely to be assisted with family labour in their operations. This is coupled with the fact that majority (69.6%) had a minimum family size of 6. The result in Table1 further showed that 95% of the respondents had some basic education. Education been an avenue through which knowledge and technology is impacted significantly in every human endeavor. It is highly important in the adoption of innovation and the overall performance of the farm. Literacy is a vital asset in securing and utilizing information that are relevant to fadama farming. This therefore implies that the respondents would seek for assistance that could enhance their productivity.

According to Table 2, 71.0 percent of the respondents have been in fadama farming for over four (4) years. This is an indication that fadama farming is becoming attractive as a source of income for the farmers in the state. The long years of experience would enable the respondents have enough and adequate knowledge of fadama farming and this could translate into higher productivity. Also, the findings showed that 70.0 per cent of the respondents either, bought and have access to their land through gift. These categories are more likely to adopt improved production technologies than those on lease or share tenancy. In addition Table 2 showed that 76.0 per cent of the Fadama farmers had farm size between 1-2 hectares. This conforms to the attributes of peasant farming having small size farms. It could be inferred that lacks of access to credit may also act as a hindrance to expansion of farms. Majority 71.0 per cent of the respondents obtain funding through the cooperative society while 8.0 per cent used private moneylenders. This could imply that the respondents do not have access to institutional source of credit.

# INFLUENCE OF SOCIO-ECONOMIC CHARACTERISTICS ON ACCESS TO CREDIT BY FADAMA FARMERS

Ordinary square regression was used for the estimation of the influence of socio- economic variables on access to credit by fadama farmers. The lead equation is as written below:

$$\text{Log } Y = 0.537 - 0.08208X_1 + 0.161X_2 + 0.05587X_3^* - 0.003898X_4 + 0.238X_5 - 0.06276X_6^* - 0.02844X_7$$

(0.86)      (0.125)      (0.0107)      (0.81)      (0.115)      (0.038)      (0.61)

Figure in parentheses are standard error

\*Significant at 5%

$R^2 = 10.5\%$

$\overline{R}^2 = 15\%$

F = 1.548

It revealed a coefficient of variability ( $R^2$ ) of 0.105 (Table 3), which implied that the model explains only 10.5 per cent of total variations'. This is contrary to the earlier report by Bifarin and Folayan (2006) in their study of the determinant of access to credit by small holder farmers in Ondo State with coefficient of variability ( $R^2$ ) of 97.1%.

Farming experience ( $X_3$ ) and education level ( $X_6$ ) were the only significant independent variables at 5 per cent level of significance. All the explanatory variables except age ( $X_2$ ), family size ( $X_4$ ), educational level ( $X_6$ ) and source of credit ( $X_7$ ) had positive signs meaning that an increase in each of the variables will lead to decrease in access to credit by the respondents. Farming experience had positive sign implying that the higher the variable, the higher the access to credit.

## SUMMARY AND CONCLUSION

The regression result shows that the significant factor that affects the access of Fadama farmer's to credit are farming experience and the level of education. The government should therefore liberalize assess to credit and both education ( formal or informal) for the respondents

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